Remarks

Reconsideration of this Application is respectfully requested.

Claims 1-20 are pending in the application, with 1, 8, 15, and 20 being the independent claims. Claims 1, 8, 15, and 20 are sought to be amended. The amendments to claims 1, 8, and 15 add the recitation "wherein the specific securities in the actively managed exchange traded fund are unknown to a trader who uses the hedging portfolio to hedge against an investment in the actively managed exchange traded fund." Support for this recitation is found in the specification at page 19, lines 8-13:

> The factor model provides the specialist or market maker with a portfolio of instruments, securities, etc. that will enable the specialist to create a hedge that will track the basket of securities that make up the exchange traded fund portfolio without the specialist ever knowing what specific securities are in the fund.

The remaining amendments are solely for purposes of clarification, and do not affect the scope of the claims.

Based on the following Remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Interview

The Applicants thank Examiners Charles and Poinvil for taking time on September 22, 2004, to conduct an interview in this case. During the interview, the Applicants explained the invention, pointed out the need in the art for the invention, and discussed claim amendments to overcome the art of record. The above amendments are the result of this discussion. Examiner Poinvil informed the Applicants that, upon receipt of this Amendment and Reply, a new search will be made prior to a final decision on this application.

Rejections Under 35 U.S.C. § 101

The Examiner rejected claims 1-4, 6, 7, and 20 under 35 U.S.C. § 101 for allegedly failing to "recite technology, i.e. computer implementation or any other technology in a non-trivial manner." The Applicants respectfully request reconsideration of this rejection. The Applicants note that the rejection under § 101 was first made in the Office Action of October 4, 2003, but that the claims were amended on January 27, 2004. In that Amendment, the claims were amended to recite, in part:

> "...a computer programmed with factor analysis software determines the factor information, which measures the sensitivity of the fund holdings to factors that affect the value of the fund holdings; and using a computer with the factor information as an input to select a portfolio of financial instruments to produce a hedging portfolio with substantially the same sensitivity to the factors that affect the value of the fund holdings...."

Following this Amendment, the Examiner issued a Final Office Action (Paper No. 10), which stated that "[t]he examiner's 101 objection is reversed in light of amendments to the claims." The finality of the Final Office Action (Paper No. 10) was withdrawn in the present office action (Paper No. 14). However, the Examiner "maintained" the § 101 rejection in the present office action.

It is clear from the plain language of the claims that the invention makes "non-trivial use of computers." The rejected claims use "a computer programmed with factor analysis software" to determine "factor information, which measures the sensitivity of the fund holdings to factors that affect the value of the fund holdings" and to "select a portfolio of financial instruments to produce a hedging portfolio with substantially the same sensitivity to the factors...". Using a computer to measure sensitivity to factors is a non-trivial use, and using a computer to create a hedging portfolio with substantially the same sensitivity to the factors is also a non-trivial use.

The Applicants believe that the Examiner was correct in withdrawing this rejection in the Final Office Action. It is clear that the claims, as amended January 27, 2004, fully comply with the requirements of 35 U.S.C. § 101. During the interview on September 22, 2004, Examiner Poinvil reviewed the claims, suggested the clarifying amendments made herein, and agreed that they complied with § 101. As such, the Applicants respectfully request that this rejection be withdrawn.

Rejections Under 35 U.S.C. § 103

The Examiner made several rejections under 35 U.S.C. § 103. For the following reasons, the Applicants disagree that the claimed subject matter would have been obvious from the cited references, and thus request reconsideration of the rejections, and that they be withdrawn. As an initial matter, it appears that the Examiner has not addressed the currently pending set of claims in this rejection. The claim language recited in these rejections is from the claims as they were before the Amendment of January 27, 2004. The Applicants respectfully request that the Examiner address the currently pending claims.

The base rejection for all independent claims is the combination of Kiron (U.S. Patent No. 5,806,048) and Pilipovic (6,456,982). Some of the rejections of the dependent claims additionally add Waclawski (U.S. Patent No. 6,377,907) or Meyers (U.S. Patent No. 5,937,159). Specifically, Waclawski is applied against claims 4 and 11, and Meyers is applied against claims 5, 12, and 15-19.

While the Applicants do not in this Response argue in detail the separate patentability of these dependent claims for the sake of brevity, they do assert the separate patentability of the dependent claims. Initially, as detailed below, the base combination of Kiron and Pilipovic is improper. The combinations with Meyers have been addressed in previous papers. In addition, Waclawski is completely irrelevant to the claimed invention. The claimed invention deals with generating hedging portfolios for actively managed exchange traded funds, whereas Waclawski deals with allocating computer resources. While both Waclawski and the present invention use factor analysis, the similarity ends there. The present invention deals with a completely non-analogous art because it is from a different "field of endeavor" and deals with a completely

unrelated problem, and thus any combination with Waclawski is improper. *See In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992).

Kiron fails to teach "actively managed exchange traded funds," "determining factor information about the fund holdings," or "producing a hedging portfolio with substantially the same sensitivity to the factors".

The Examiner rejected claims 1-4, 6-7, 8-11, and 13-14 under 35 U.S.C. § 103(a) as allegedly having been obvious from the combination of Kiron and Pilipovic. The Applicants request reconsideration and that the rejection be withdrawn.

The Examiner wrote that Kiron discloses "a method of hedging investment risk in actively managed exchange traded funds (col. 1, lines 40-55 and col. 2, lines 1-20, col. 3, lines 1-10)." (Paper No. 5 at page 4). The Examiner is incorrect: Kiron does not teach any method of hedging investment risk in actively managed exchange traded funds.

First, Kiron does not teach any method relating to exchange-traded funds. Kiron rather focuses on "open end fund securitization," which simply creates

> "a second type of security, which will invest substantially all of its assets in the targeted open end mutual fund shares. The preferred embodiment for this new security is a 'closed end fund of funds', which has a fixed number of shares outstanding, and a **constant portfolio which is invested exclusively in the shares of the targeted open end fund(s)**. The result is a new security which will synthetically replicate the performance of those shares purchased, and do so with a high degree of correlation and consistency. This new security can then be listed on a National Securities Exchange and traded without restriction. After trading begins, linked derivative securities can then be listed and traded.
>
> ...
>
> The invention will act as a hedge for market makers who wish to lay off their risk of making markets in options on the underlying security."

Kiron, col. 2, line 64 – col. 3, line 21 (emphasis added). Thus, Kiron relates to a "fund of funds," i.e., a tradeable fund that holds as its assets the shares of a different non-tradeable fund. This security has a "constant portfolio which is invested exclusively in the shares of the targeted open

end fund(s)." (Kiron, col. 3, lines 2-3). This security is not an "exchange-traded fund" as that term is used by those in the art. An "exchange-traded fund" (or "ETF"), is a very specific type of security that holds as its assets underlying securities (not another fund), has a portfolio that constantly changes (not a constant portfolio like that disclosed by Kiron), and creates and redeems shares in a very specific, S.E.C.-approved way that allows for it to trade on an exchange (the invention disclosed by Kiron is a "closed end" fund that does not create or redeem shares in any specific way).

Second, while Kiron does state that its security may be used "as a hedge for market makers," it does so in a very different way from the present invention. Kiron creates a "hedge" by simply creating an investment that invests in the very fund against which a hedge is sought. This simple (and likely ineffective) solution is in contrast to the present invention, in which a computer determines the sensitivity of the actively managed exchange traded fund to factors that affect the value of the fund holdings, then generates a hedging portfolio that has substantially the same sensitivity to the factors that affect the value of the fund holdings. Nothing in Kiron suggests the steps of measuring the sensitivity of a fund to factors, then generating a hedging portfolio with substantially the same sensitivity to the factors.

The Examiner has acknowledged that Kiron does not disclose "receiving or determining factor information about the fund holdings, wherein the factor information measures the sensitivity of the fund holdings to factors that affect the value of the fund holdings; and ... [producing] a hedging portfolio with substantially the same sensitivity to the factors that affect the value of the fund holdings." (Paper No. 14, page 4) Of course, this is a major deficiency in Kiron. The Examiner has acknowledged that Kiron fails to teach or suggest the very steps that

form the present invention. Apparently, the Examiner is only relying on Kiron for its teaching of a "fund" comprising a group of securities and of the concept of "hedging" generally.

There is no motivation to combine Pilipovic with Kiron, and Kiron teaches away from any such combination.

To supplement the deficiencies in Kiron, the Examiner turned to Pilipovic. The Examiner writes that the "motivation to combine [Kiron and Pilipovic] is Pilipovic's econometric model extracts relevant econometric parameters that influence the price of the hedging strategy." (Paper No. 14, page 4). As the Applicants pointed out in their December 30, 2003 filing, this is not a motivation to combine these references, but rather is a paraphrase of Pilipovic's teachings. In addressing the Applicants' argument that there was no motivation to combine Kiron with Pilipovic, the Examiner wrote, "Pilipovic does make up for the deficiencies in Kiron because the parameters underlying the econometric model, when input within the model, effectively reflect the sensitivities of the characteristics of the portfolio's interday returns of the inventor's mirrored portfolio that projects the expected return of the original portfolio. Thus, the motivation is the individual parameters, when placed into the econometric model with the various econometric weights, reflect the sensitivities and forward price volatilities of the original portfolio to effectuate the projected return of the original portfolio, aiding decision making." (Paper No. 14, page 2).

The Applicants submit that the Examiner has still not provided a motivation to combine Kiron and Pilipovic. The Examiner has simply picked pieces from Pilipovic with the benefit of hindsight and knowledge of the present invention, and dropped them into Kiron. This approach to obviousness rejections is impermissible. *See, e.g., In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992) ("it is impermissible to use the claimed invention as an instruction manual

or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious .... This court has previously stated that '[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.'"). There is simply no motivation to combine Pilipovic with Kiron because nowhere does Pilipovic state that the methods set forth therein could be applicable to select a hedging portfolio with the same sensitivity to a set of factors determined to affect the value of a fund's holdings.

Furthermore, Kiron *teaches away* from any combination with Pilipovic. Kiron states that one of the difficulties with trading open-end funds is that "the investment banking house did not know exactly which securities the open end funds held." (Kiron, col. 1, lines 65-67). Kiron's teachings do not involve any disclosure of the securities in the open end funds. But Pilipovic requires disclosure of the underlying securities. *See* Pilipovic at col. 8, line 27 ("the input data includes the most recent liquid market data."). Nothing in Kiron or Pilipovic suggests a solution to this problem. Only the present invention solves this problem. By producing a hedging portfolio with the same sensitivity to a set of factors as an actively managed exchange traded fund, the hedging portfolio can be disclosed *without disclosing the securities in the fund itself.* Neither Kiron nor Pilipovic, nor the combination thereof, discloses or suggests that this would be possible.

Pilipovic fails to teach "actively managed exchange traded funds," "determining factor information about the fund holdings," or "producing a hedging portfolio with substantially the same sensitivity to the factors".

It is clear that there would have been no motivation to combine Pilipovic with Kiron. But even if those references could properly be combined, the combination still would not suggest the presently claimed invention. Like Kiron, Pilipovic discloses nothing at all about actively

managed exchange traded funds. In fact, the only thing that Pilipovic has in common with the present invention is that they both use factor analysis, although they do so to different ends.

Pilipovic uses multi-factor econometric models in the context of predicting "future market behavior" (Pilipovic, col. 1, lines 15-18), and *not* in the context of creating a hedging portfolio for an actively managed exchange traded fund. The portions of Pilipovic cited by the Examiner (Pilipovic, col. 7, lines 20-30 and col. 8, lines 10-40) simply confirm that Pilipovic is about something completely different than the present invention. It is about simulating the future behavior of stocks for "supporting financial decisions". (Pilipovic, col. 8, lines 4-6). The present invention, on the other hand, does nothing at all to support financial decisions. Instead, it generates a hedging portfolio with the same sensitivity to a set of factors as an actively managed exchange traded fund. This hedging portfolio cannot be used to support financial decisions, and does not give any information about future market behavior. The only "future behavior" that is known about it is that it should behave the same way with respect to the factors as does the actively managed exchange traded fund itself.

Pilipovic thus has no need to – and there is no teaching therein to – "determine the sensitivity of the fund holdings to factors that affect the value of the fund holdings" as claimed. Nor does Pilipovic teach producing "a hedging portfolio with substantially the same sensitivity to the factors that affect the value of the fund holdings." Thus, the very teachings that the Examiner is relying upon in Piliopvic to cure the deficiencies of Kiron are actually not even present in Pilipovic itself.

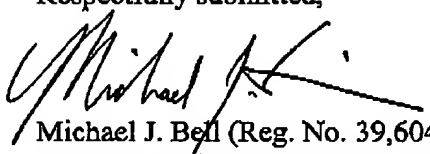
Therefore, neither Pilipovic nor Kiron, individually or in combination, teaches or suggests the presently claimed invention. The Applicants thus request reconsideration of this rejection, and that it be withdrawn.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Michael Stimson at (202) 383-6906.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,



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